

Morphology Analysis: Northside Drive

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Abstract

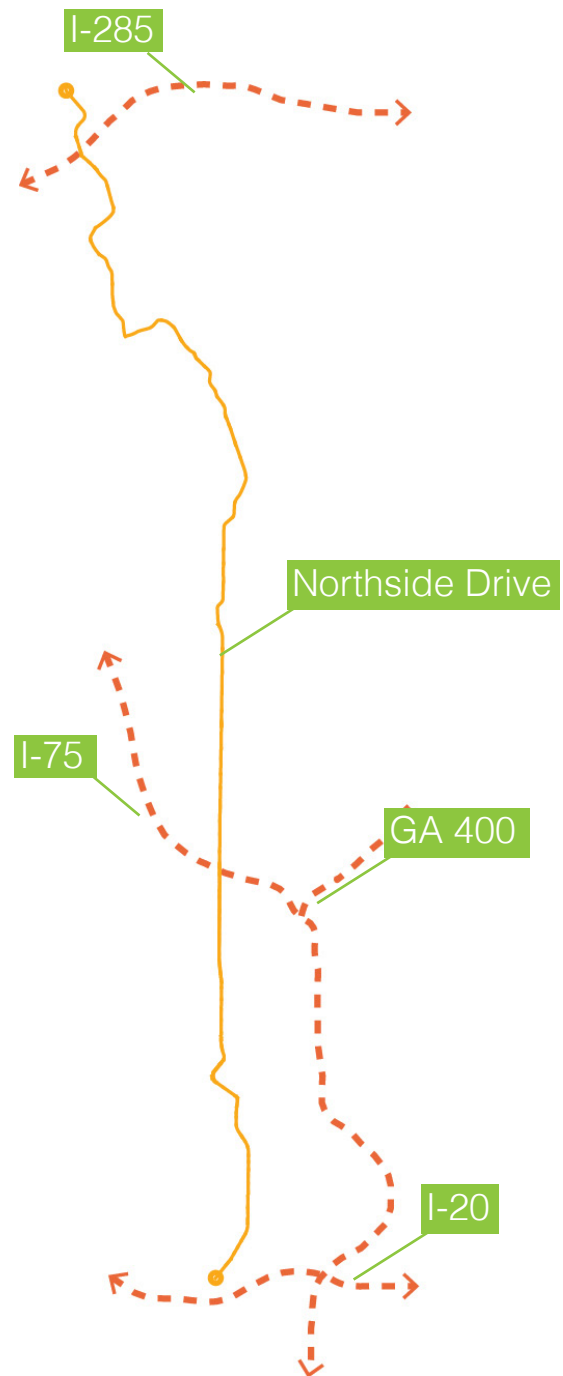
Northside Drive is a major arterial street in the City of Atlanta. This street is an expansive and underutilized corridor that connects North Atlanta to its downtown core. This proposal intends to analyze this arterial in terms of its morphologies, through the exploration of the static, elastic, campus and resilient tissues present. This will be done through mapping, diagramming, examining current proposals for the arterial, and empirical analysis of the corridor. This data will aid in answering several questions pertaining to the characteristics of the study area, shaping the structure of this paper.

These questions will form layers of analysis that reveal the nature of Northside Drive's morphological relationships. First, one needs to understand where is Northside Drive? This component is explained by understanding the street's regional connectivity and scale relative to the city. The next task is to define what it is? This is supported by understanding the implications of its current morphologies and form. Third, one needs to investigate how did it get this way? What were the major events that shaped this space? This story is told through the production of a written and visual timeline illustrating the major moves that created the current Northside Drive. The next step is to understand what the problems are with the corridor and also what are the current studies in this area? Once these questions are synthesized, proposals for change can be made.

Where is it? _____

Where is it?

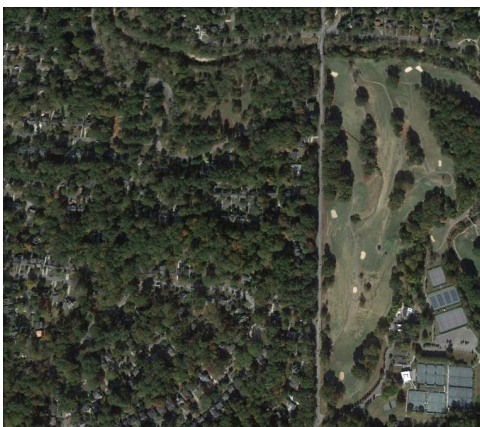
Northside Drive serves as a major urban arterial corridor within both the City of Atlanta and its metropolitan area. This right of way also exists as a Georgia State route and a U.S. Highway. Its geographic position defines itself at a regional, city and neighborhood scale as it passes through a plethora of urban and suburban conditions. Along its approximately twelve mile corridor stretching from North Atlanta to south of the CBD, Northside Drive exists within a mix of development patterns including low density residential, strip commercial and urban mixed use.



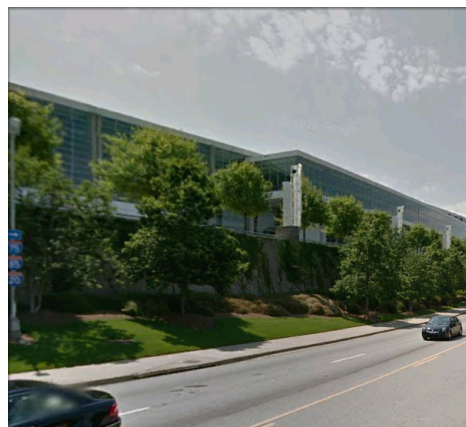
1.1 Regional Connections

Regional Connectivity

Regionally, Northside Drive connects the west side of I-285 to the downtown core of the city. In relationship to the surrounding highways, the corridor sits east of Interstate-85, crosses Interstate -75 just above Midtown Atlanta, and ends before reaching Interstate-20 to the south. The corridor itself has many physical forms, in the residential areas north of the city center, it serves as a two lane street surrounding by single family homes. Here, it passes through low density neighborhoods and by Atlanta landmarks such as the Bobby Jones Golf Course. As one travels south, the street widens up to six lanes as you approach neighborhoods such as Home Park, Midtown and downtown Atlanta, noted in Figure 1.5. Here, the corridor connects to other regional destinations such as the Georgia World Congress Center, The Atlanta University Center, and the Georgia Dome. Understanding this extensive connectivity, high amounts of traffic exist throughout the corridor, which can carry up to 25,000 cars per day in some of its segments, (City of Atlanta, 2005).



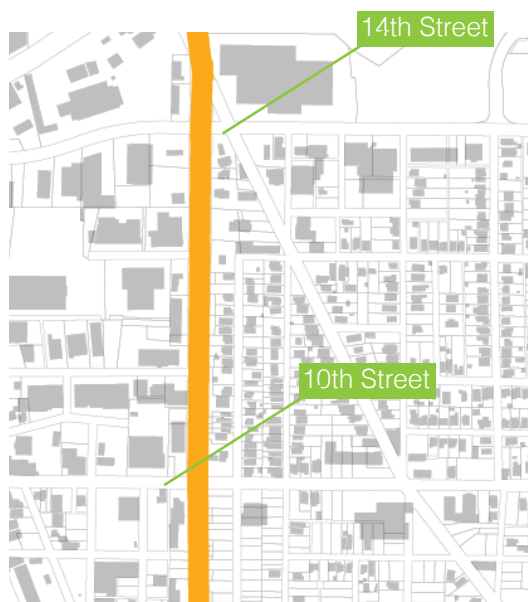
1.2 North Atlanta conditions (Google Earth)



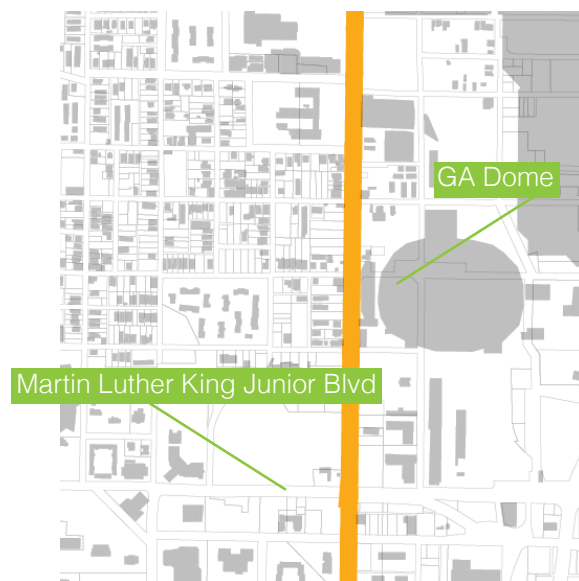
1.3 Georgia World Congress Center

City Connectivity

Within the city, Northside serves as a major urban arterial street. As described by the FTA, arterial systems should carry a major portion of trips, the majority of movements desiring to by pass the central city, as well as intra-area travel between city centers and outlying residential areas (Federal Transportation Authority, 2012). With that said, the study corridor exists just west of the most urbanized areas of the city. It connects to major cross streets in the Midtown and Home Park neighborhoods such as 10th Street and 14th Street shown in Figure 1.6. At this point, it is also running parallel to Marietta Street, an important right-of-way because of its proximity to the railroad. Further south in proximity to the downtown core, Northside connects to several prominent streets including both Martin Luther King Jr and Ivan Allen Boulevard.



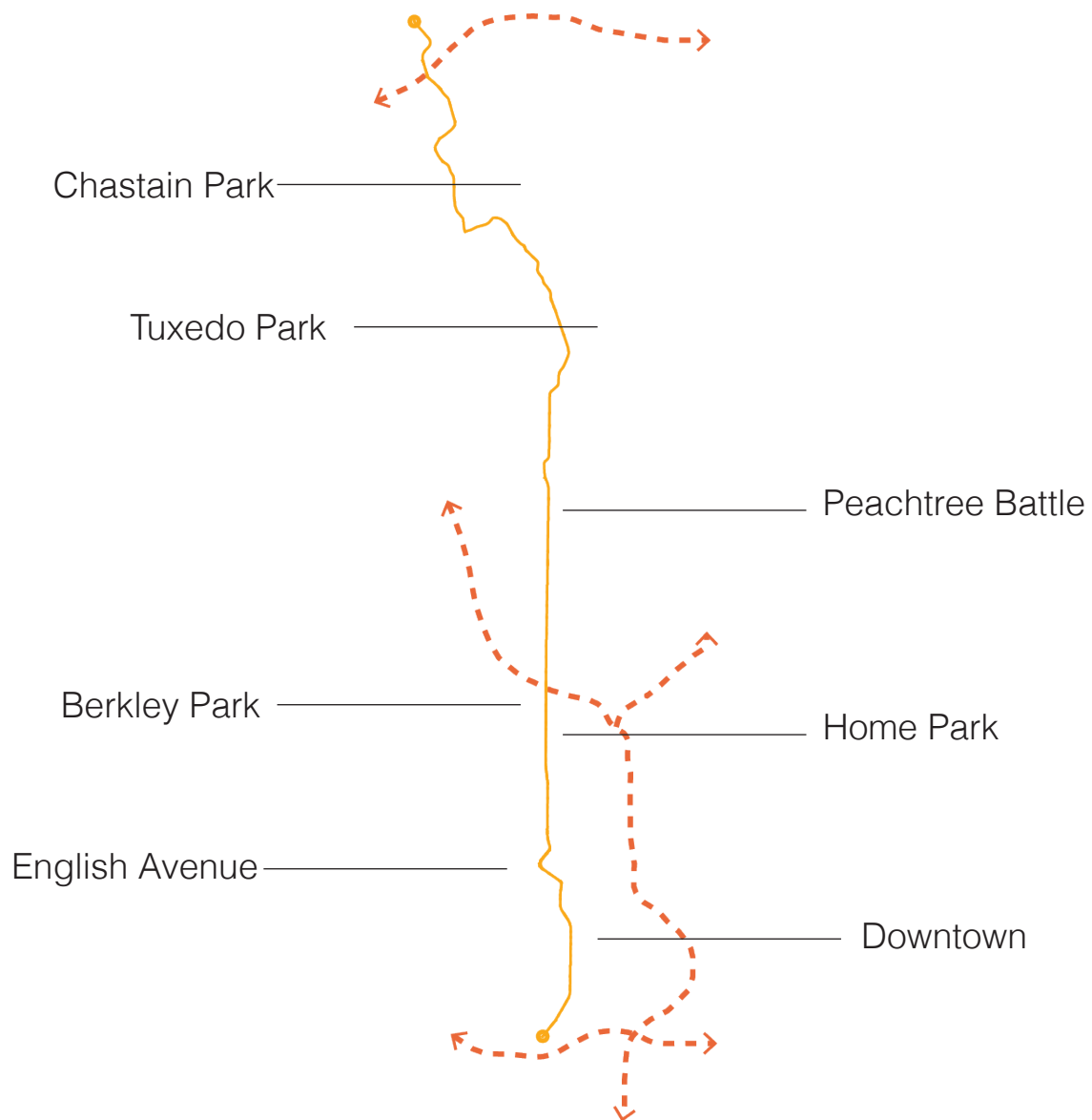
1.4 Home Park connections



1.5 Downtown connections

Neighborhood Connectivity

Northside Drive connects more than ten Atlanta neighborhoods to each other including: Chastain Park, Peachtree Battle, Berkeley Park, Home Park, English Avenue, Vine City, and Castleberry Hill, illustrated in Figure 1.8. Within these communities the corridor serves local traffic and intersects many local streets, increasing connectivity.



1.6 Neighborhood connections

What is it?

What is it?

Northside Drive is a corridor composed of several urban and suburban tissues, which are defined as, “distinct patterns of block, lot and building aggregations,” (Scheer, 2008). These basic layers, present within developed areas, are able to create wildly different conditions based on how quickly or slowly they change. Understanding this, as Atlanta has grown and changed over the years, so has the physical nature of Northside Drive. Drawing from its historic lineage within the city and examining its present state will reveal what exactly it is today.

In order to analyze the corridor, its morphology must be understood. This type of research seeks, “...analysis that breaks the physical city down into fundamental elements that can be found in all cities, regardless of their location, history, and culture.” This method of study, one of the physical form of the city, is termed urban morphology. The conditions present on Northside Drive relate to several urban and suburban tissues that compose a collective morphology. The tissues within this corridor include suburban typologies, termed elastic, static, and campus (Scheer, 2008). Suburban conditions include frameworks that, “are often organized in a dendritic pattern with dead ends and cul-de-sacs,” noted in *Retrofitting Suburbia*. The forth tissue, called the resilient, or the urban tissue, is a grid iron pattern organized into interconnected networks (Williamson, 2008).

Understanding the role of urban morphology and its relationship to time, Northside Drive was developed incrementally on pre-urban fabric, which is formed

What is it?

through the areas superstructure and its infill. As noted by Scheer, this type of incremental development creates environments, “which are difficult to plan or change because they are structurally flawed.” Collectively, these intersecting physical patterns create the collaged composition of the twelve mile study corridor we see today (Scheer, 2008).

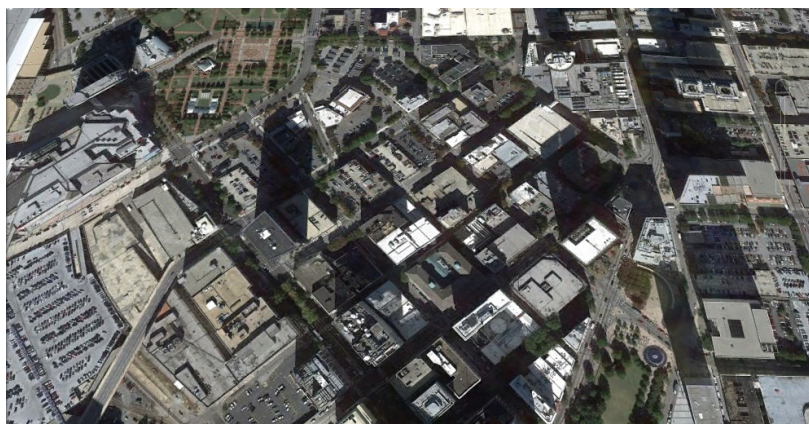
Within this study, the many tissues of Northside Drive will be analyzed through the morphological filter. Within tissues, several layers exist, which compose a hierarchy of components within the urban fabric. Again, the most resilient layers within a tissue's morphology are the infill and superstructure. The superstructure refers to, “paths and land boundaries that exist prior to urban settlement boundaries or are created to substantially restructure an urban settlement,” as noted by Scheer. This statement is referring to the original street pattern or grid of the area. Infill is defined as the further subdivision of lands, such as plots and the additional paths that run through them. Understanding this, these two components have the most impact on the development of tissues. Additionally, these layers are composed of structures and objects, but as stated by Scheer, “on the urban scale, it is sometimes useful to set aside the consideration of the function of buildings in order to discover more fundamental physical patterns (Scheer, 2008).” Overall, this method of understanding tissues, how they operate, and set a framework for development will guide the analysis of the Northside Drive morphology. The tissues types will be analyzed in the next section.

Resilient Tissues

This tissue includes land laid out on a grid. The grid iron form of development patterns, as noted by Morris in *A History of Urban Form* are, “efficient, and produce an equality of land subdivision.” These patterns also promote aesthetic uniformity. An example of this tissue is in both the Midtown and Fairlie Poplar neighborhoods of Atlanta, illustrated in Figures 1.7 and 1.8. The morphology of these areas are the least subject to change due to their compact and seldom changing framework, suitable for a mix of uses (Morris, 1979).



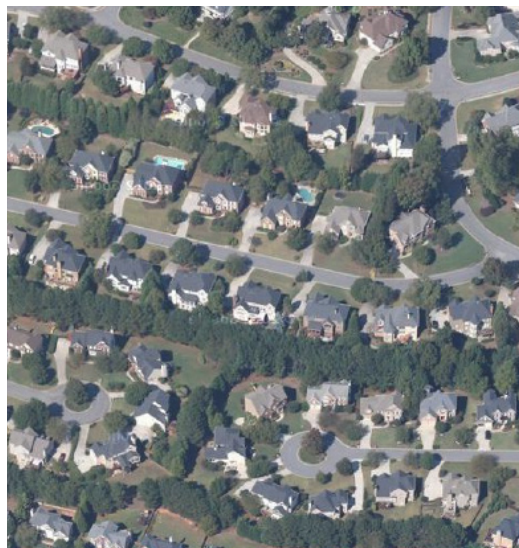
1.7 Midtown Atlanta



1.8 Fairlie Poplar (Source: Google Earth)

Static Tissues

Static tissues, “...are planned subdivisions, in which lots and streets were developed and sold for the construction of single family homes,” as noted by Scheer. These conditions are the most stable of the four types, exhibiting less susceptibility to change over time. They are similar to resilient tissues in that they are planned and built in a short time period, but create quite different environments. These lots, developed as groups, are designed around one use which is their greatest flaw. They are subdivided from a larger pre urban lot of the area’s superstructure into small parcels that are relatively the same size (Scheer, 2008). As noted in Figure 1.9, most of the development north of Atlanta exhibits this pattern. The photo below shows an area designed with a static tissue.



1.9. Static Tissue (Source: Google Earth)

Elastic Tissues

Elastic tissues most often create strip conditions within both urban and suburban development areas. The creation of this condition is fostered by the elastic tissue's fast ability to change. These areas, "are not pre-planned, but evolve other time," through an incremental process that is on going. The changes seen within elastic conditions include varied lot sizes, each containing one structure. They develop along pre urban corridors and do no expand greatly upon urban networks or improve connectivity. The uses within these lots include a small amount of residential housing, strip centers, fast food restaurants and industrial businesses, (Scheer, 2008).

Strip conditions are present in both urban and suburban areas. They are generic and rampant, but what are they really? Several definitions offer an explanation of their physical nature and how they have assumed their form. The Urban Land Institute describes a strip condition as, "...one dimensional forms of development that lack a distinct sense of place or community that increasingly are plagued by problems to do with fragmentation, congestion, inconvenience, deterioration and visual blight." Additionally, this type of development was built for previous generations, catering to the autocentric postwar suburbanites, (Urban Land Institute, 2010).



2.0 Elastic Tissue

Campus Tissues

These tissues are composed of large pieces of land, often existing without subdivisions, and controlled by a single owner. Campus tissues are typically developed into office parks, educational institutions, civic complexes and government centers. They offer little connectivity to the outside, and tend to form border vacuums at their edges. Border vacuums refer to spaces that foster the creation of developmental barriers. For example, in *Death and Life of the Great American City*, Jane Jacobs compares borders of single use areas to train tracks. She states that uses near this development pattern are, "...the places that do worst of all, physically, [and] are typically the zones directly besides the track, on both sides." Additionally, these zones are where low value and decay appear, (Jacobs, 1961). Internally, they have two main characteristics. First, "the pre-urban lot is not subdivided and contains more than one significant structure." Second, the entirety of internal streets are private and are not placed at the boundaries of lots, (Scheer, 2008).

The physical nature of campus tissues often changes. Their lot boundaries can vary in size due to the changing demands within the tissue, growing or shrinking over time. Additionally, these tissues are often squeezed in between existing development, (Scheer, 2008). If there is left over real estate between suburban sprawl, they tend to pop up. As shown in the image below of Georgia Tech's campus, this office park exists in between sprawl development.



Morphological Analysis

The morphological analysis will investigate the entire corridor through the filter of the four tissues aforementioned. This method of investigation will reveal what Northside Drive is today. This will couple with understanding the major topographical constraints of the study area. After this analysis, the history of the corridor and major development moves within and affecting the right of way will be discussed. Understanding its current state, examining its past, and the current proposals for change will reveal informed solutions for improvement along Northside Drive.

In order to accomplish this with a large study area, the corridor will be first looked at as a whole, but analyzed in segments for closer investigation in terms of morphology and topography. A quarter of mile buffer has been established around the center line of the right of way to establish the study area. This overall diagram will reveal the various tissues and how they interact with one another. Then, the corridor will be broken down into four segments, to understand how the parts create the whole.

Northside Drive Corridor

Static



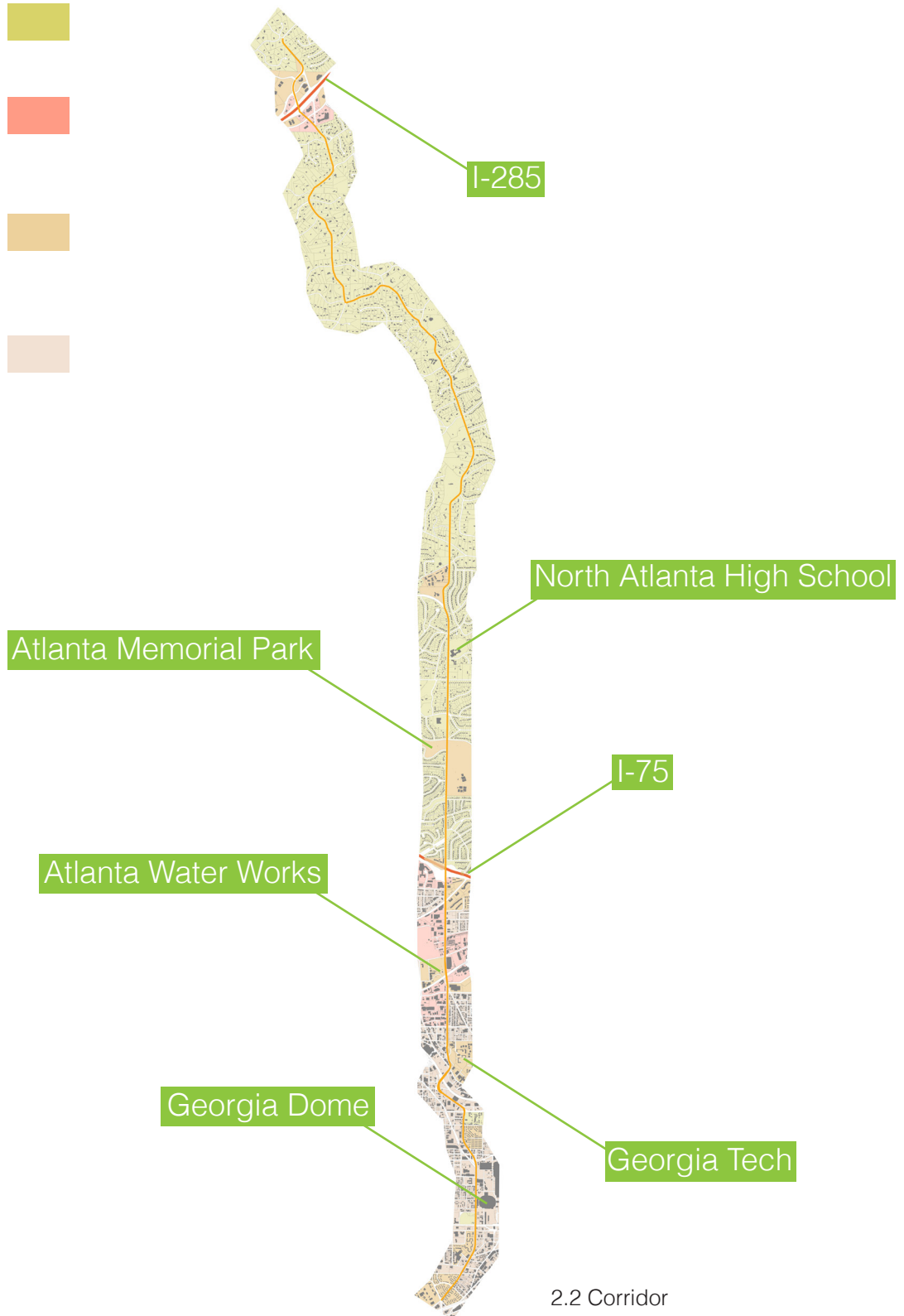
Elastic



Campus



Resilient



2.2 Corridor

Segment 1: I-285 to Mt. Paran Road



2.3 Segment 1

Segment 1: I-285 to Mt. Paran Road

Static

The most notable development pattern within this segment is the static tissue, illustrated in Figure 2.4. This tissue exists south of I-285, existing within a landscape dominated with single family homes. Clusters of lots were planned and built at the same time. Lots are designed for the building type.



2.4

Elastic

Additionally along the I-285 corridor and Northside Drive intersection, elastic tissues are present. They form a node of strip development driven by its location adjacent to the highway. The various uses and connections within these tissues are illustrated in to the bottom right.



2.5

Segment 1: I-285 to Mt. Paran Road

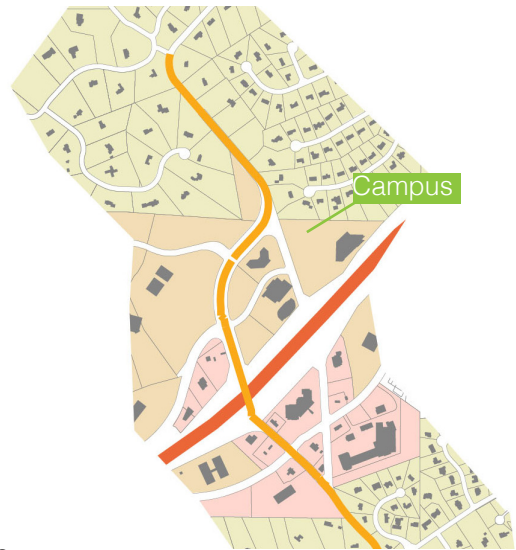
Tissue Analysis

Campus

The office parks flanking the I-285 exit corridor along Northside exhibit the classic symptoms of campus tissues. The buildings are sited within a oversized lot, and are offering only internal connectivity.

Resilient

There is not resilient tissue present in this segment.



2.6

Segment 2: Mt. Paran Road to I-75

Campus
Elastic
Static
Resilient



2.7 Segment 2

Segment 2: Mt. Paran Road to I-75

Tissue Analysis

Static

Again, this segment is dominated by static tissue. Various subdivisions exhibit the cluster lot development strategy. Single family homes are fronting a campus tissue, that of Bobby Jones Golf Course and Atlanta Memorial Park. An organic or dendritic street pattern is present.

Campus

This campus tissue is creating an amenity for the static tissue surrounding it. The open space of Bobby Jones Golf Course and Atlanta Memorial Park serves as an attractive neighbor for single family home residential. Commercial and mixed use are non existent within this stretch of the corridor.

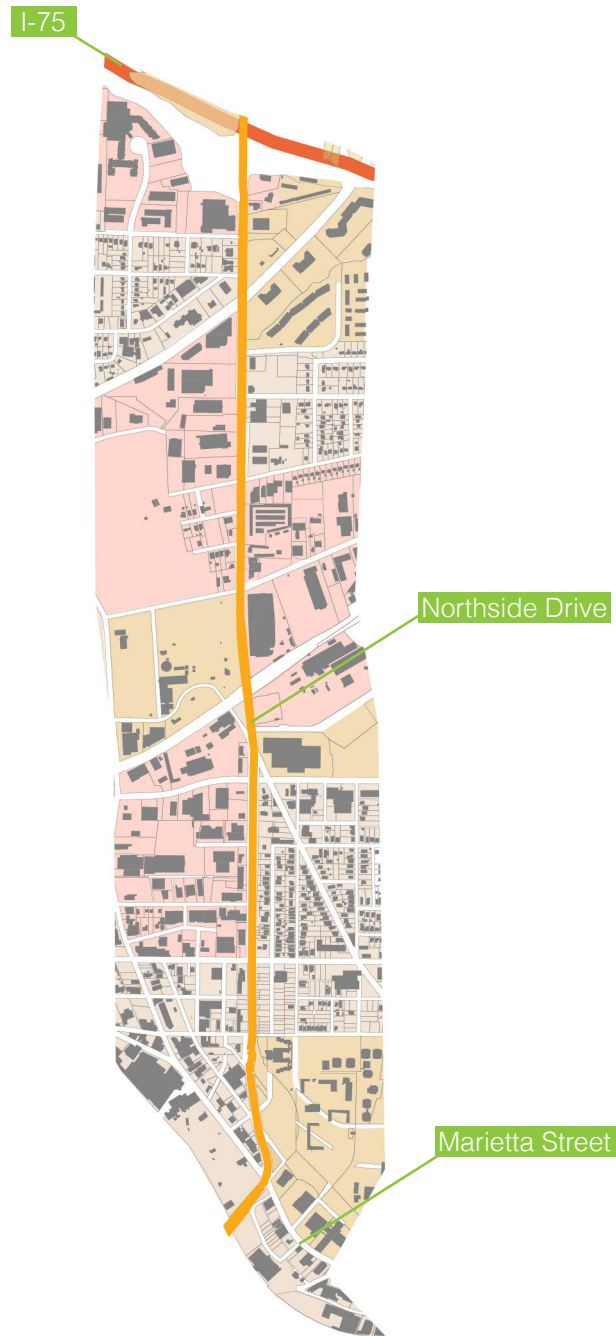
Elastic and Resilient

These tissues do not exist in this segment.



Segment 3: I-75 to Marietta Street

Campus
Elastic
Static
Resilient



2.9 Segment 3

Segment 3: I-75 to Marietta Street

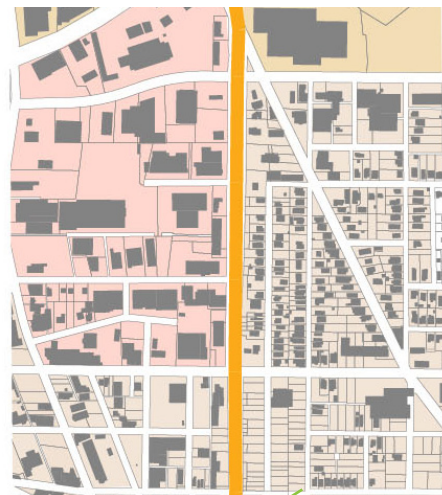
Tissue Analysis

Resilient

The first appearance of resilient tissues occurs in this segment of the Northside Drive corridor. The Berkeley Park neighborhood exhibits a gridded pattern of lots, blocks and streets, as does the Home Park neighborhood further south. These two communities illustrate former development patterns of this area, before elastic and campus tissues were integrated. Both of these neighborhoods were developed in the late 1800s and early 1900s as noted in the development patterns illustrated in the Sanborn maps, (Sanborn).



3.0



3.1

Home Park

Segment 3: I-75 to Marietta Street

Tissue Analysis

Static

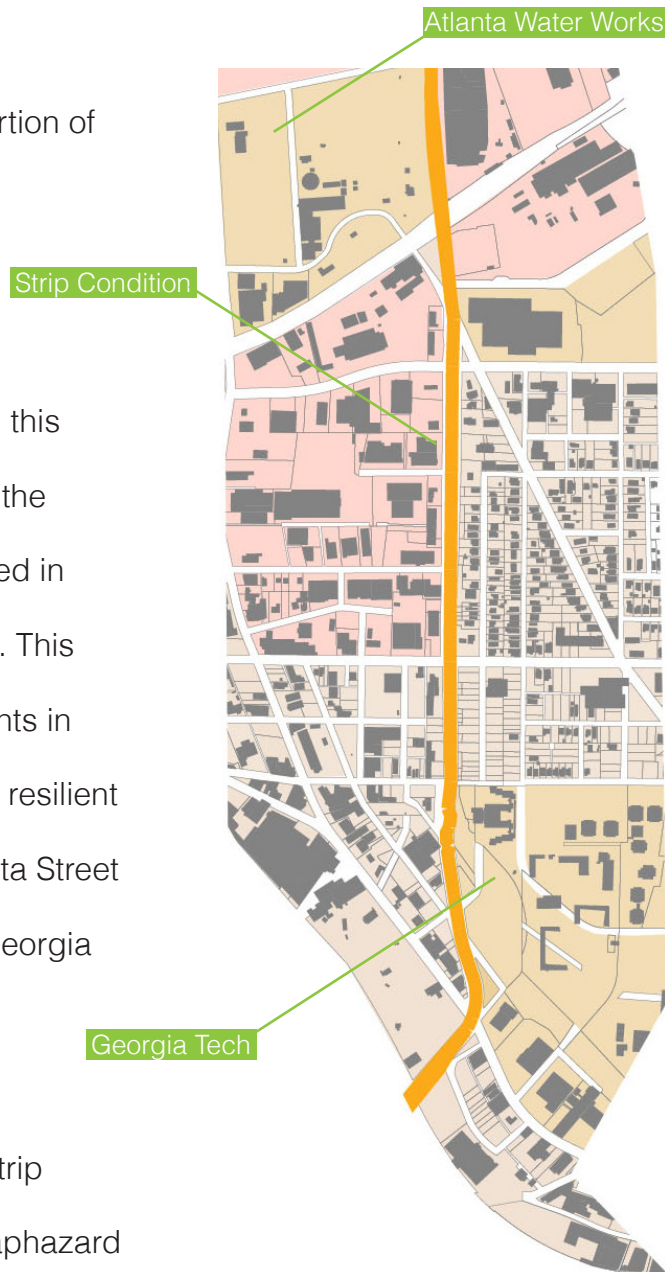
This tissue does not exist in this portion of the study corridor.

Campus

Campus tissues serves two roles in this portion of the corridor. First, it sites the Atlanta Water Works, first established in 1891, (Marietta Street Artery, 2012). This site was one of the first developments in this area. Second, as it borders the resilient tissue of Home Park and the Marietta Street corridor, it houses the campus of Georgia Tech.

Elastic

This segment exhibits the classic strip corridor condition on Northside. Haphazard land use, small buildings on large lots, high speed traffic and a lack of pedestrian accommodations are rampant in this area.



3.2

Segment 4: Marietta Street to Metropolitan Parkway

Campus
Elastic
Static
Resilient



3.3

Segment 4: Marietta Street to Metropolitan Parkway

Tissue Analysis

Resilient

This segment is mostly populated with resilient tissues, due to its proximity to the gridded downtown core of the city.

Campus

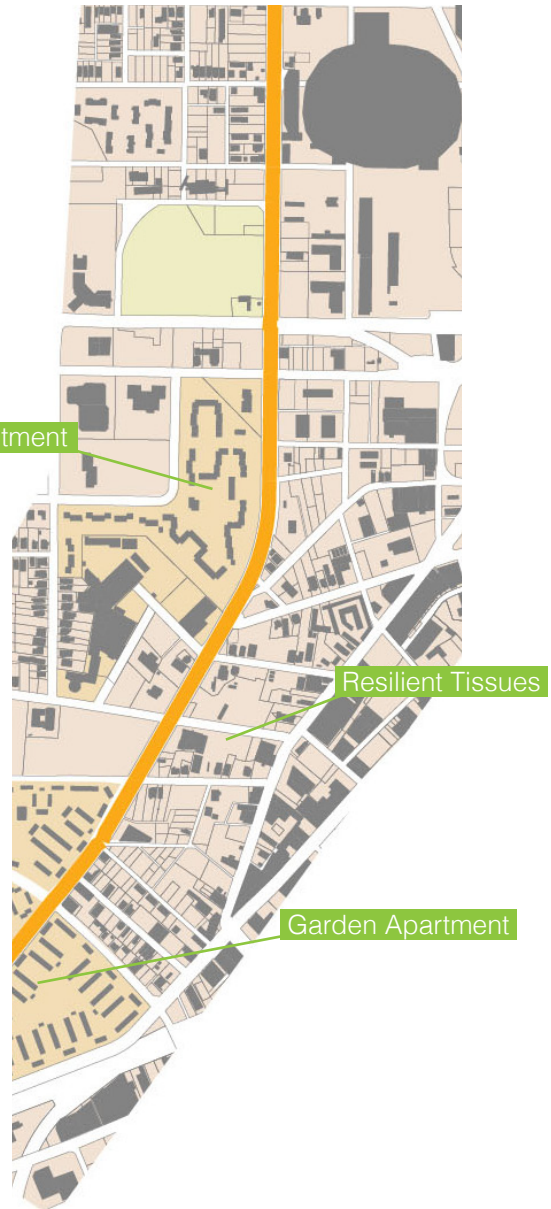
The single lot owner model in this segment has produced garden apartment complexes. They are sprinkled throughout the resilient tissues.

Static

This tissue does not exist in this portion of the study corridor.

Elastic

This tissue does not exist in this portion of the study corridor.



Tissues by Segment

Segment 1 Campus
Elastic
Static

Segment 2 Campus
Static

Segment 3 Campus
Elastic
Resilient
Static

Segment 4 Campus
Resilient

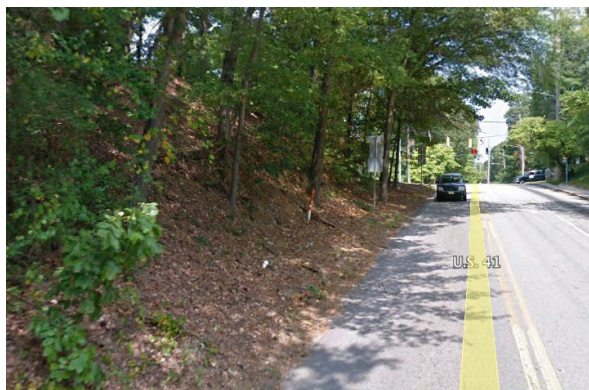
Topography

Segment 1 + 2

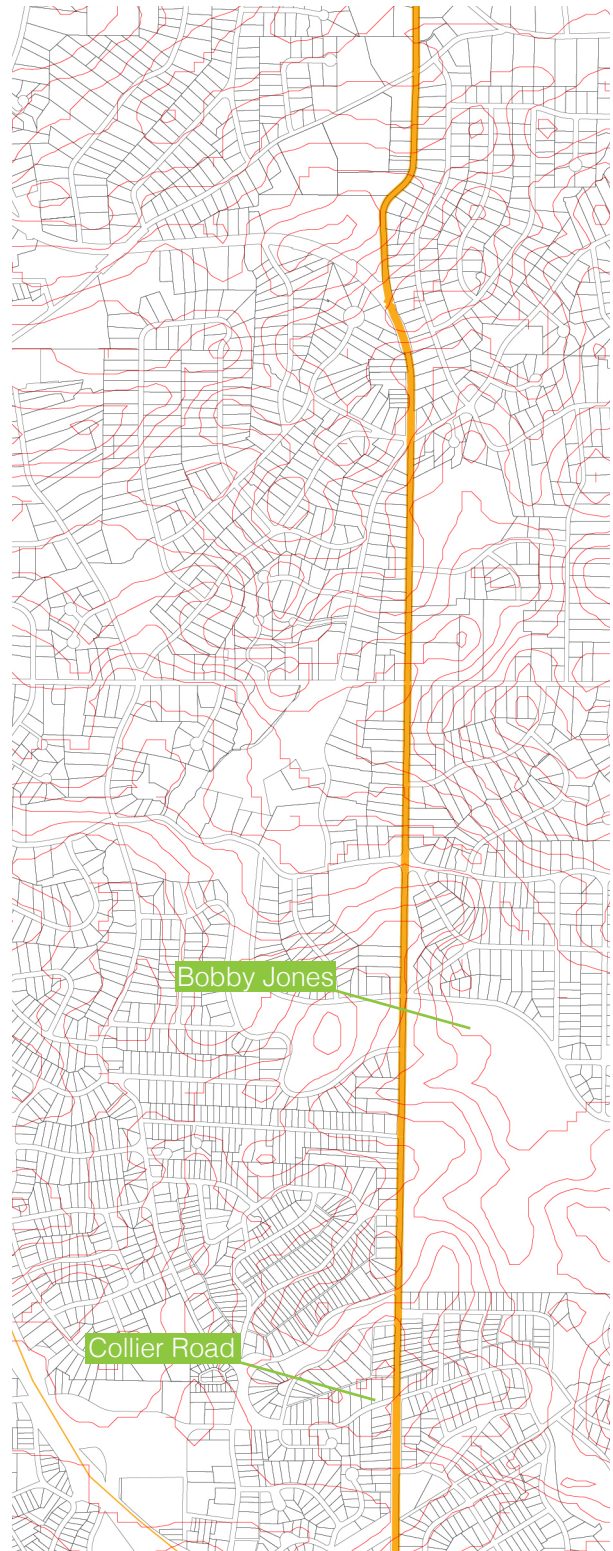
These areas are highly populated with static tissues. The residential homes along this portion of Northside boast large setbacks from the ROW, as shown in the photo below. These setbacks are large and varied. Large changes in elevation also aid the disconnect between the building and the street.



3.5 Setback on Northside Drive within static tissue (Source: Google Earth)



3.6 Elevation change at Collier Road (Source: Google earth)



3.7

Topography

Segment 3: I-75 to Marietta Street

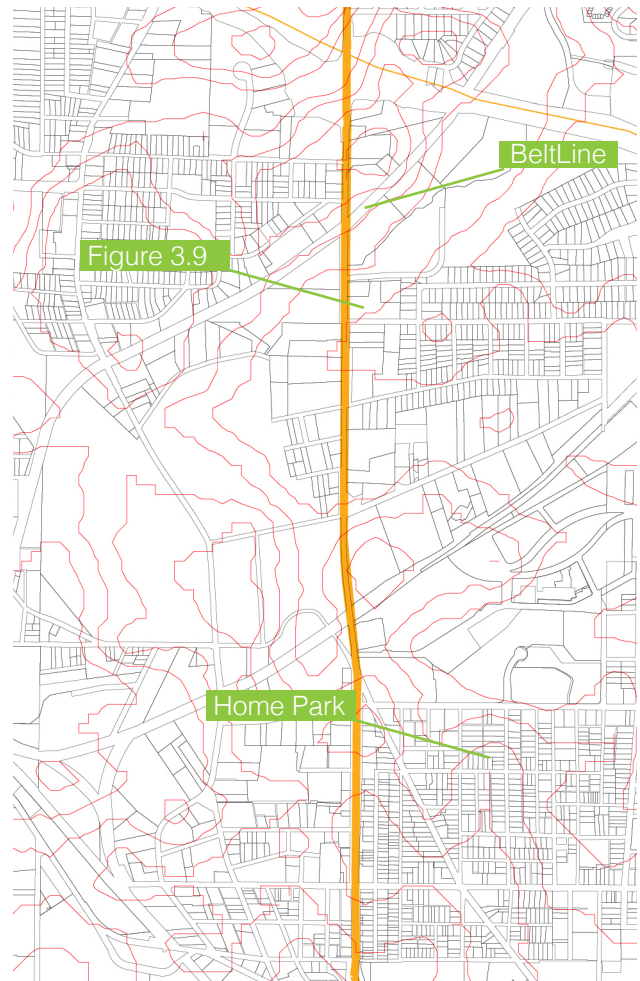
This segment boasts a combination of elastic and campus tissues. Combining this with the large changes in elevations between the buildings and the street creates a huge disconnect between the spaces. Setbacks are also very inconsistent in this area.



3.8 Elevation change at sidewalk, looking south towards 14th street



4.0 Elevation change at sidewalk, looking south towards 14th street at Waterworks



3.9 Segment 1 + 2 Conditions

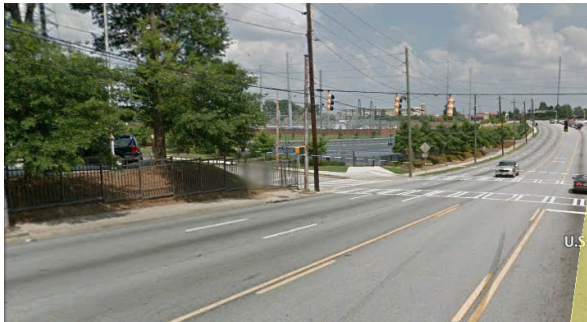


4.1 Elevation change looking north, just south of I-75 (Source: Google Earth)

Topography

Segment 4: Marietta Street to Metropolitan PKWY

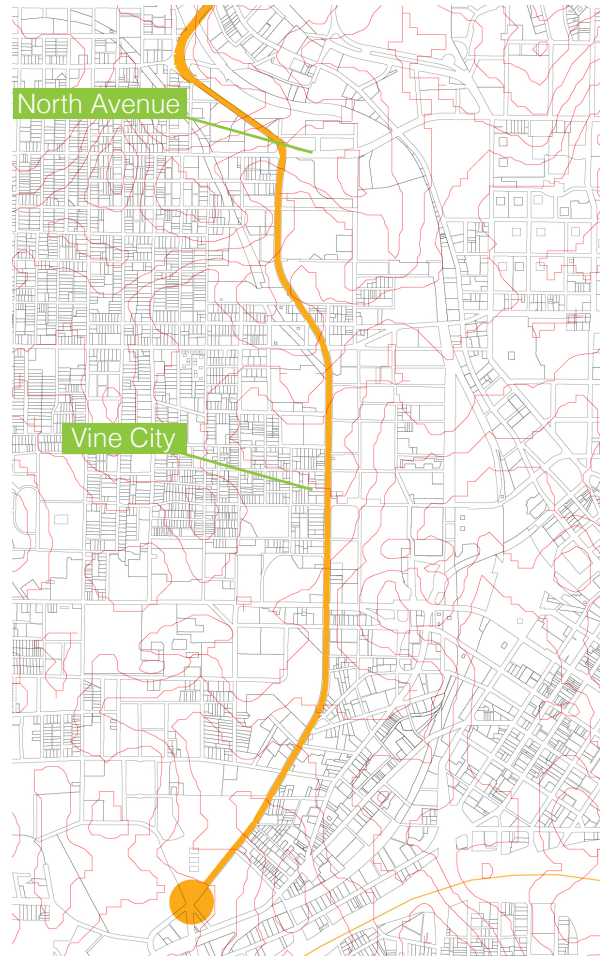
This segment has the more consistent topographical conditions. It exhibits less elevation changes overall and is the most urbanized portion of the corridor. There are some infrequent barriers in residential areas, such as Vine City with small retaining walls bordering the streets, shown in the photo below.



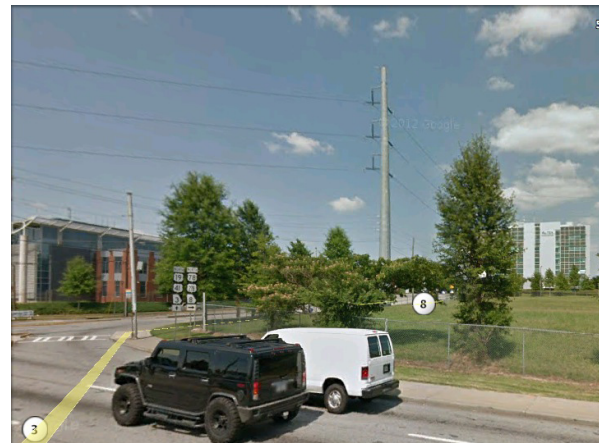
4.2 Looking north, elevation changes are minimal (Source: Google Earth)



4.4 Vine City homes with retaining walls (Source: Google Earth)



4.3 Segment 4 Topography



4.5 Site at Northside Drive and North Avenue (Source: Google Earth)

How did it get this way?_____

Timeline

- 1911 Northside does not exist, its future right-of-way north of 14th Street is called Hemphill Avenue, (Sanborn).
- 1924 Street car track extension shown on Hemphill Avenue to Atlanta Water Works, (H.W. Locher).
- 1925 The extension of Hemphill Avenue occupies same right-of-way of future Northside Drive, (Sanborn).
- 1928 Northside Drive appears as the right-of-way name of Hemphill Avenue north of 14th Street, outside Atlanta city limits of this time period, (Sanborn).
- 1931 The same right-of-way appears as Northside Drive, (Sanborn).
- 1932 Northside Drive extends south through the former Grove Street right-of-way of the Home Park neighborhood, connecting to Marietta Street, (Sanborn).
- 1940 Northside Drive, at this time also known as US 41, and formerly GA Route 3 is expanded, (Marietta Street Artery).
- 1971 Further expansion
- 1980 Northside Drive's right-of-way set, reflects current conditions.
- 2013 Serves as a major urban arterial in the City of Atlanta

History

Present day Northside Drive evolved from the combination of several right-of-ways within the City of Atlanta over the last century. The initial development of this corridor started just west of Midtown near Hemphill Avenue and the Home Park neighborhood. Early development of this area was land marked by businesses such as the Atlanta Water Works. These facilities opened up between the years of 1892 and 1893, existing on Hemphill Avenue, on what is presently called Northside Drive, establishing development on the fringe at the city limits of late nineteenth century Atlanta, (Marietta Street Artery, 2012). Additionally, this area was known for other industrial uses such as Atlantic Steel, The White Provisions Company, and the famed Marietta Street Artery serving the tremendous rail industry of Atlanta, (Marietta Street Artery, 2012). Understanding this early development, the following text will tell the story of and illustrate the known time line of Northside Drive, in an effort to understand how these moves created its physical form.

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History

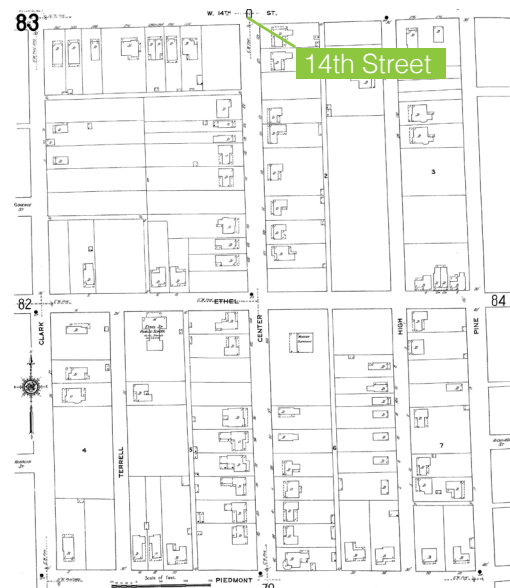
1911-1940: Hemphill Avenue and Grove Street Expansion

The 1911 collection of Sanborn Fire Insurance Maps made of Atlanta illustrates the conditions of this area. These maps reflect the right-of-ways of what today is the called Northside, but exist as several different streets. Hemphill Avenue north of 14th Street occupies the same right-of-way as the present Northside Drive at this location. Moving south, Grove Street exists as another the right-of-way of the present day corridor. This map illustrates the pre urban fabric of the corridor show in Figures 4.6 and 4.7.

As illustrated in the images, the resilient tissue morphology of this area resembles pre-urban and rural development. There are very few structures, and not every block is subdivided. Additionally, the ROW is existing at the fringe of master planning and outside of the city limits of 1911. This development pattern reflects the beginning characteristics of an elastic tissue as described by Scheer, (Scheer, 2008).

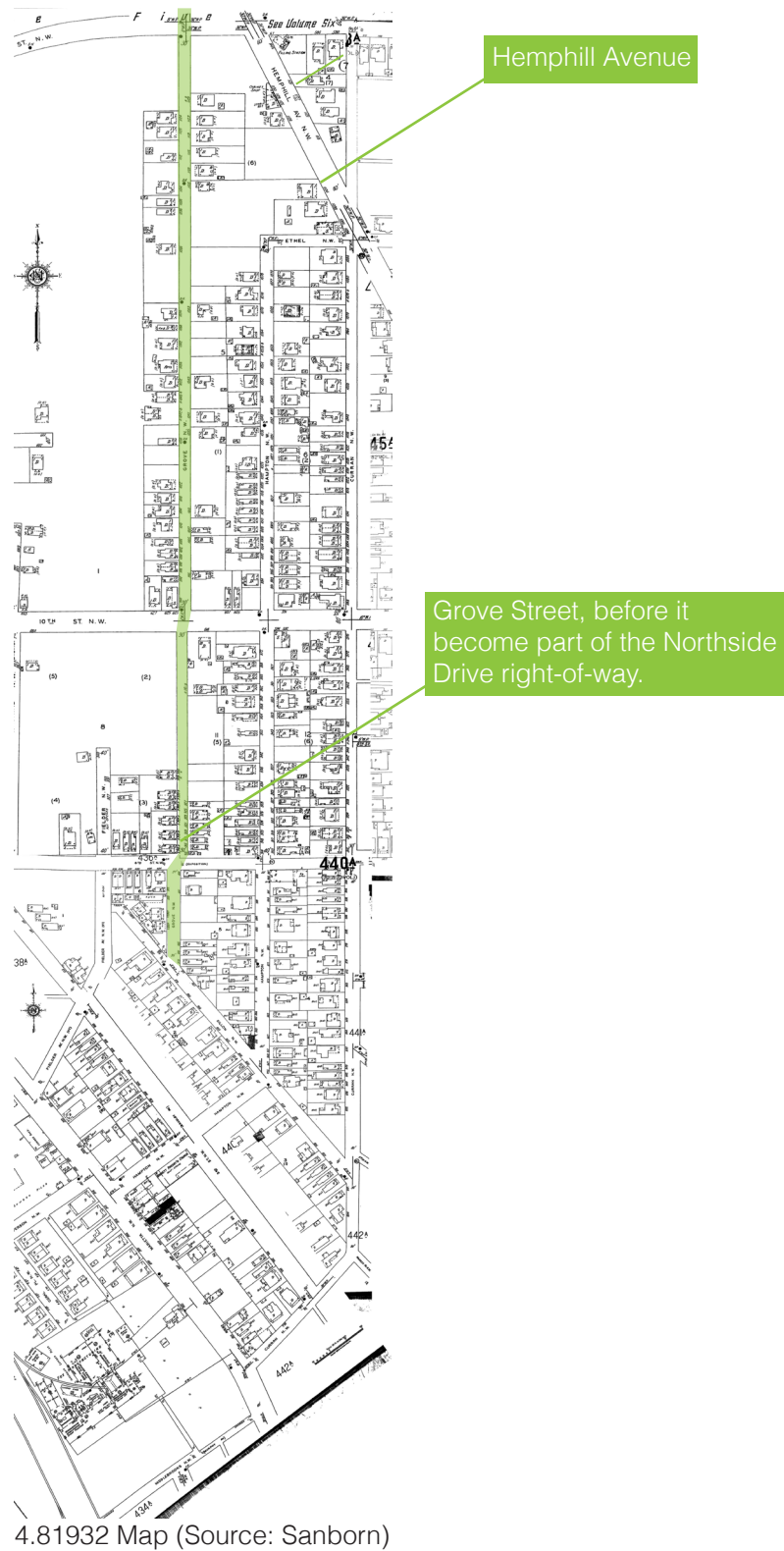


4.6 Hemphill Avenue, 1911 (Source: Sanborn)



4.7 Home Park, 1911 (Source: Sanborn)

History



History

1940-1970: Transportation Plan and Sprawl

The Atlanta Highway and Transportation plan of 1946 jump started the continued expansion of Northside Drive to the south. Although this stretch of corridor included a trolley-bus route at the time, noted in Figure 5.3, it would not last for long. This system was shut down in 1949, (Marietta Street Artery, 2012). Understanding this, Northside's fate as a major arterial road was sealed, and as the 1946 plan states, "a standard right-of-way width of 80 feet should be established for all major streets." This large corridor would be stitched together as far south as the former Gordon Street, and part of this new right-of-way forms the Northside Drive of today.

This framework set up development patterns that privileged the car. This is illustrated in the photographs to the right. They are exhibiting the classic symptoms of sprawl including large set backs and surface parking.



4.9 Autocentric development, 1950s (Source: Atlanta History Center)

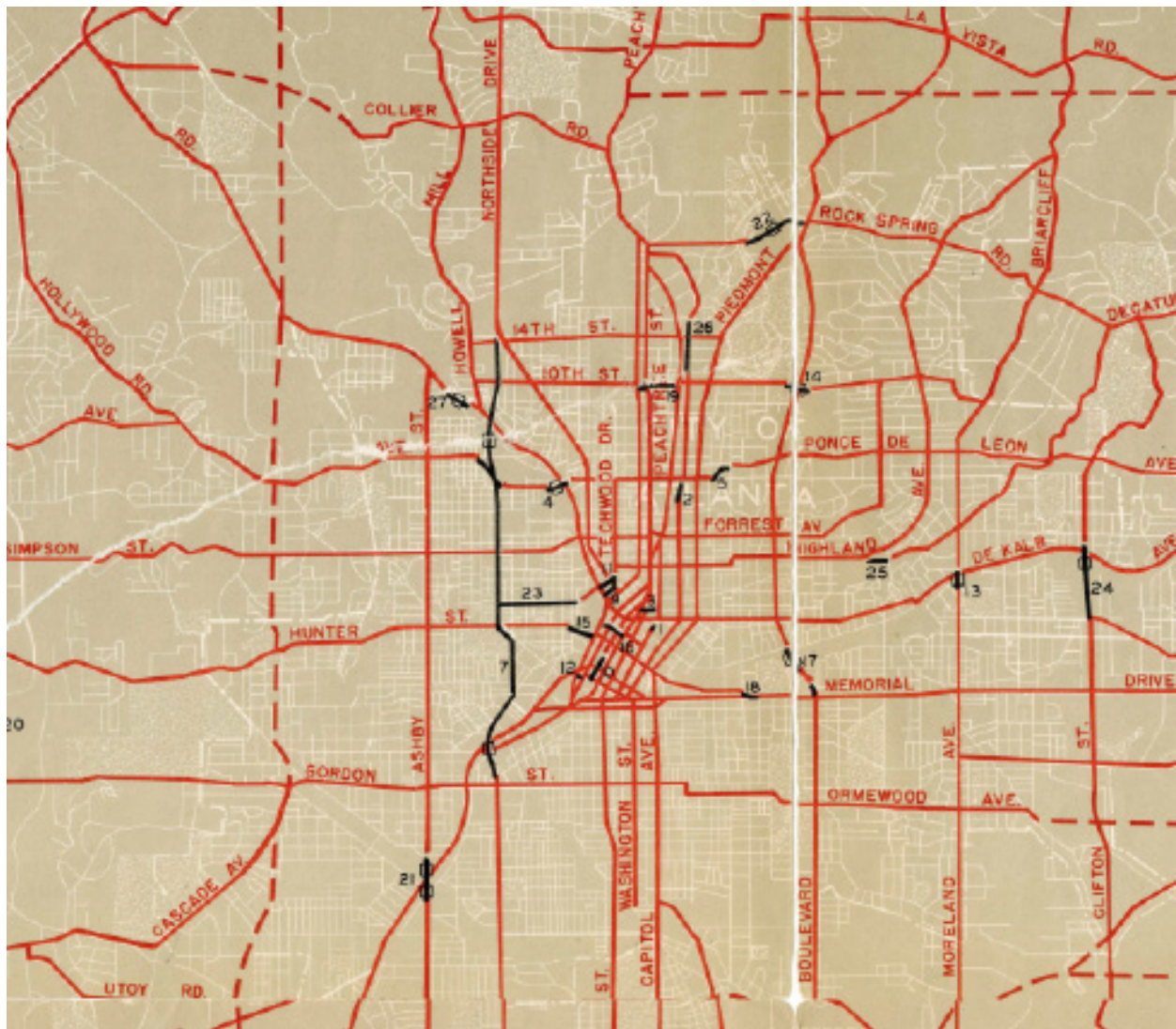


5.0 Autocentric development, 1950s (Source: Atlanta History Center)



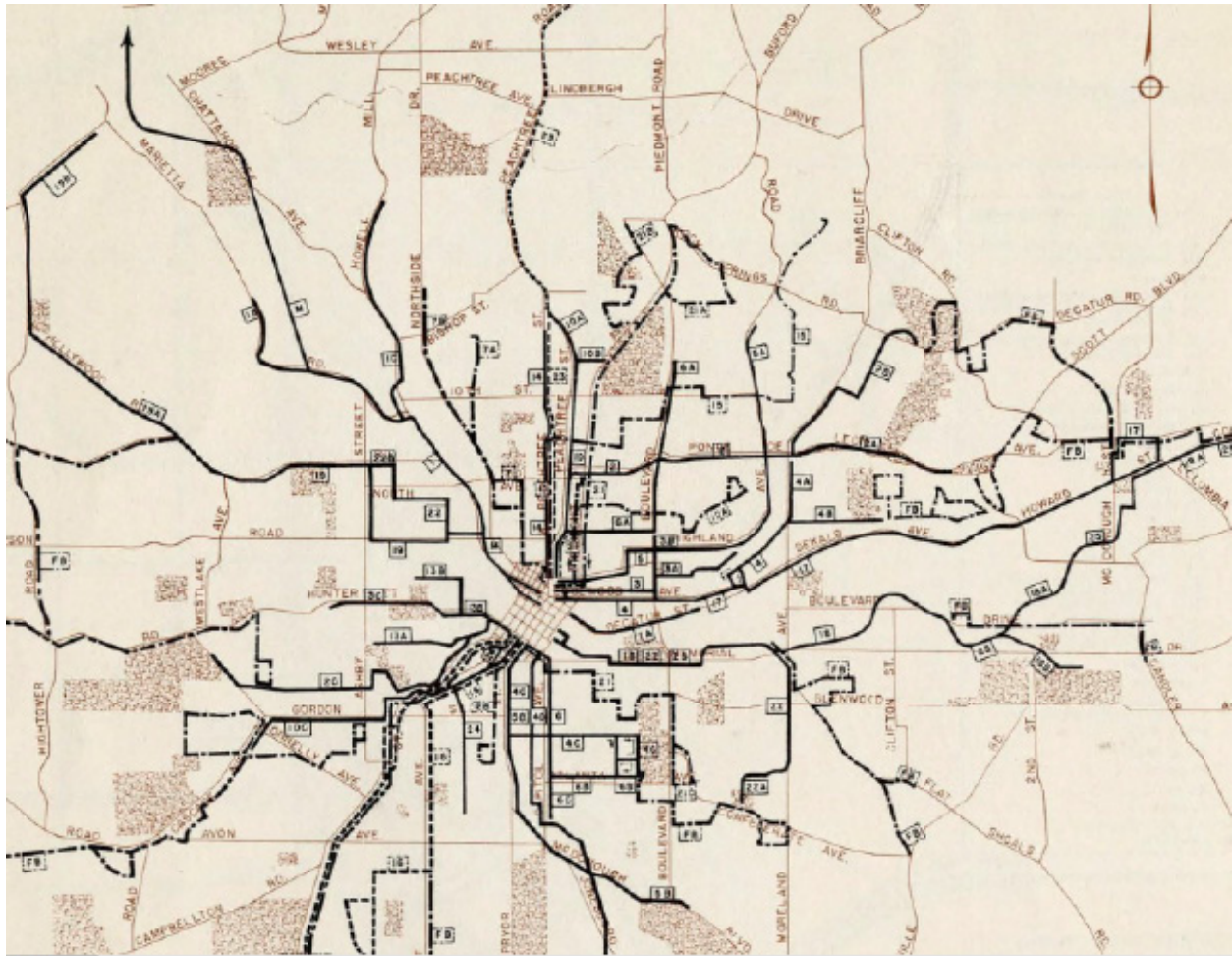
5.1 Autocentric development, 1950s (Source: Atlanta History Center)

History



5.2 "Recommended Arterial Street System shown in RED with its improvement in Black"
(Source: H.W. Lochner)

History



5.3 "Existing Transit System", the Northside Drive trolley bus route is shown as a dashed line
(Source; H.W. Lochner)

History

1960s-Present: The Urban Arterial

During this time period, the street assumed its current form, one of an autocentric design, moving thousands of cars throughout the city everyday. The figure below shows the alignment appearing as it is today, this image is from the late 1960s.

This photo is courtesy of Georgia Tech's archives.



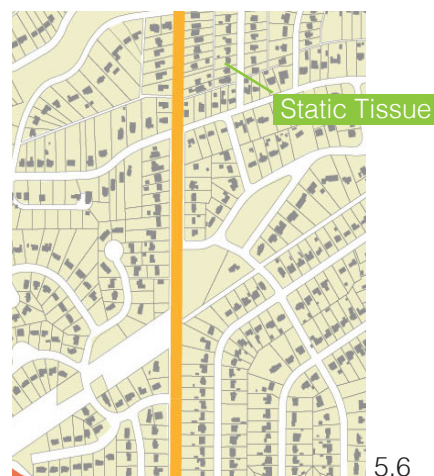
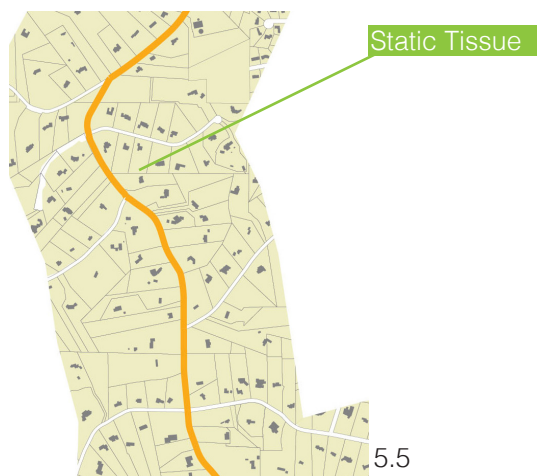
5.4 1968 Aerial, Georgia Tech Campus (Source: Georgia Tech)

What are the problems? _____

What are the problems?

Summarizing the observations from the above analysis, Northside Drive is a particular type of arterial. It is one that changes its conditions rapidly through twelve miles of corridor. Clearly, the interaction of topography and morphology has created the greatest disconnect between some conditions within the study area. The topographical barriers along Northside area varied and great. Layering this knowledge with the understanding that this street was developed incrementally for different reasons at different times lends its self to the idea that the lack of master planning has greatly crippled the corridor. Strategies for change must be particular and informed through the layering of morphological and topographical issues to propose solutions.

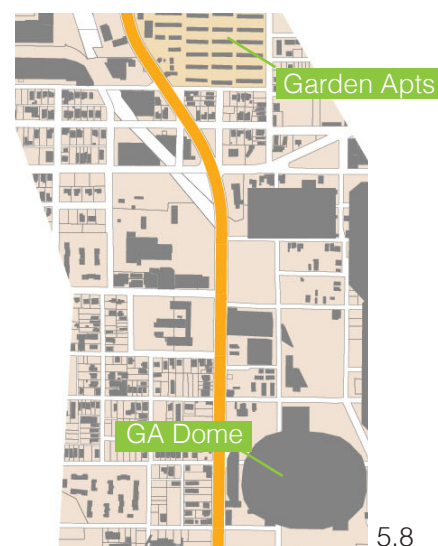
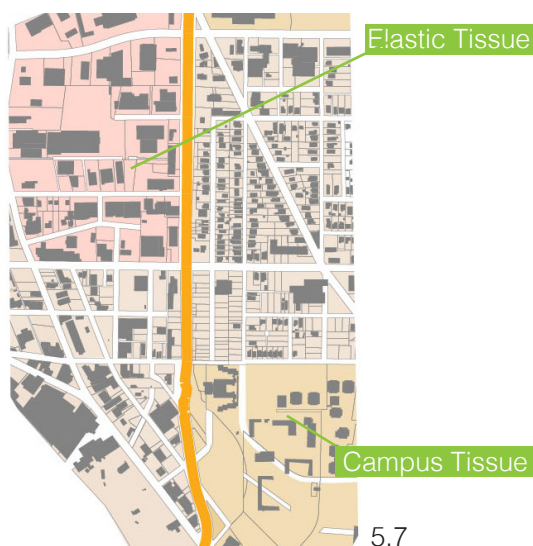
As illustrated in the diagrams below, the collective observations are used to define problems for each segment. Both segment 1 and 2 exhibit similar unwanted conditions. The presence of a great amounts of static tissue creates a choke hold on changes in development patterns in this area. From I-285 to I-75 there is very little that can change in the near future. The varied topographical conditions and the complete disconnect between building and street are rampant and not easily solvable.



What are the problems?

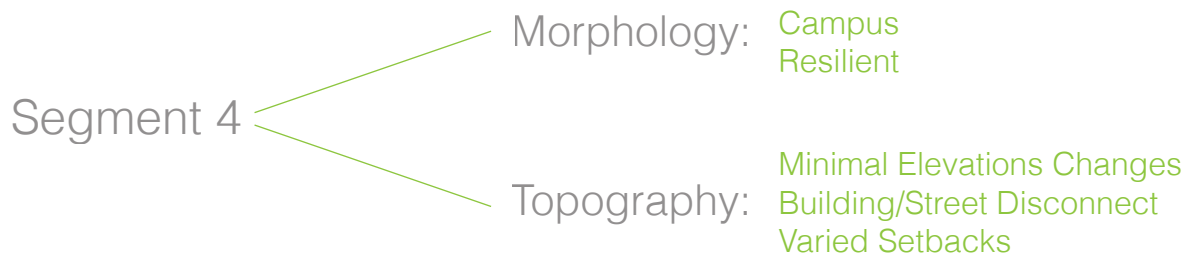
As one approaches the more urbanized section of the street, more opportunities for change are possible. Segment three exists from I-75, running south to Marietta Street. This area contains both resilient, campus and elastic tissues. As noted by Scheer, the elastic tissue has a fast ability to change. Its adjacent campus tissues, often owned by a single person also present possibility for redevelopment, (Scheer, 2008).

Segment four exists adjacent to the downtown core of the City of Atlanta. This area, filled with both campus and resilient tissues of neighborhoods such as Vine City and English Avenue presents problems existing near large scale development in the form of garden apartments and both entertainment and commercial uses such as the Georgia Dome and Georgia World Congress Center. This area has minimal topographical barriers compared to the rest of the corridor, only exhibiting scattered retaining walls facing the street.



What are the problems?

Observations:



What are the proposals?

City of Atlanta Corridor Study

Vision:

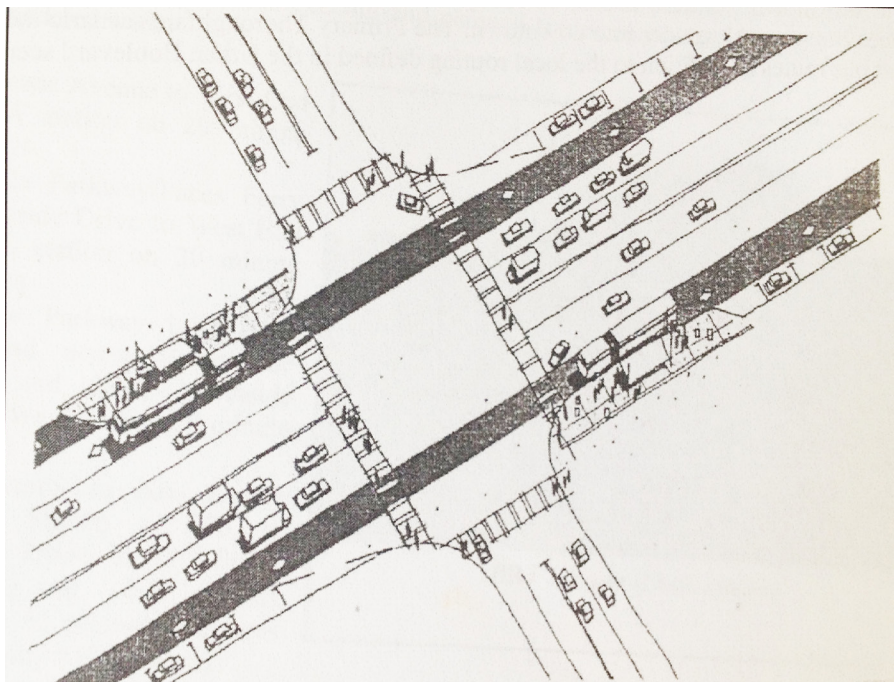
As noted in the 2005 Northside Drive Corridor Study its purpose is to, “evaluate the existing transportation infrastructure and develop alternative land-use and transportation scenarios for the corridor,” as noted by the City of Atlanta. The study areas include: Deering Road, Vince City MARTA and McDaniel Street. This study takes the form of a traditional planning study combining statistical data including population, land use and real estate development trends in the area. As noted in the study this area has, “a resurgence of development along Northside Drive and the western portion of the City of Atlanta.” This trend is influenced by both the high prices of living in Midtown and Downtown area, and this corridor’s geographic relationship to Georgia Tech, Atlantic Station, and the Georgia World Congress Center among others, (The City of Atlanta, 2005).

Two proposals are asserted for the entire corridor, one as an urban boulevard, one as a primary thoroughfare. The urban boulevard is as noted by the City as, “a vision of improved localized trip making with modest throughput capacity for regional vehicular movement.” The details of this proposal include a continuous six lane scheme with, “intensive access management treatments centered on a controlled green landscaped median and shared driveway access to residential and commercial parcels along the corridor. This proposal includes local bus service along the corridor (The City of Atlanta, 2005).

The primary thoroughfare scenario is, “focused more on regional movement and connectivity, coupled with improved localized mobility along the corridor,” noted in the Northside Drive Corridor Study. This proposal extends the urban boulevard from six to eight lanes. The green median remains also remains throughout the corridor. Six of the eight lanes would be dedicated to vehicular traffic, and two to transit.

City of Atlanta Corridor Study

Overall, this study is comprehensive but lacks an understanding of the corridor's overall morphology and challenges it presents. First, it only studies Northside Drive up until Deering Road, and does not cross I-75 and to extend north. Second, The two proposals for both six and eight lanes promote a less pedestrian friendly environment, as illustrated in the Figure 5.9, from the corridor study. The proposal does promote nodal development within its study zones, which is probable given the morphological barriers aforementioned.

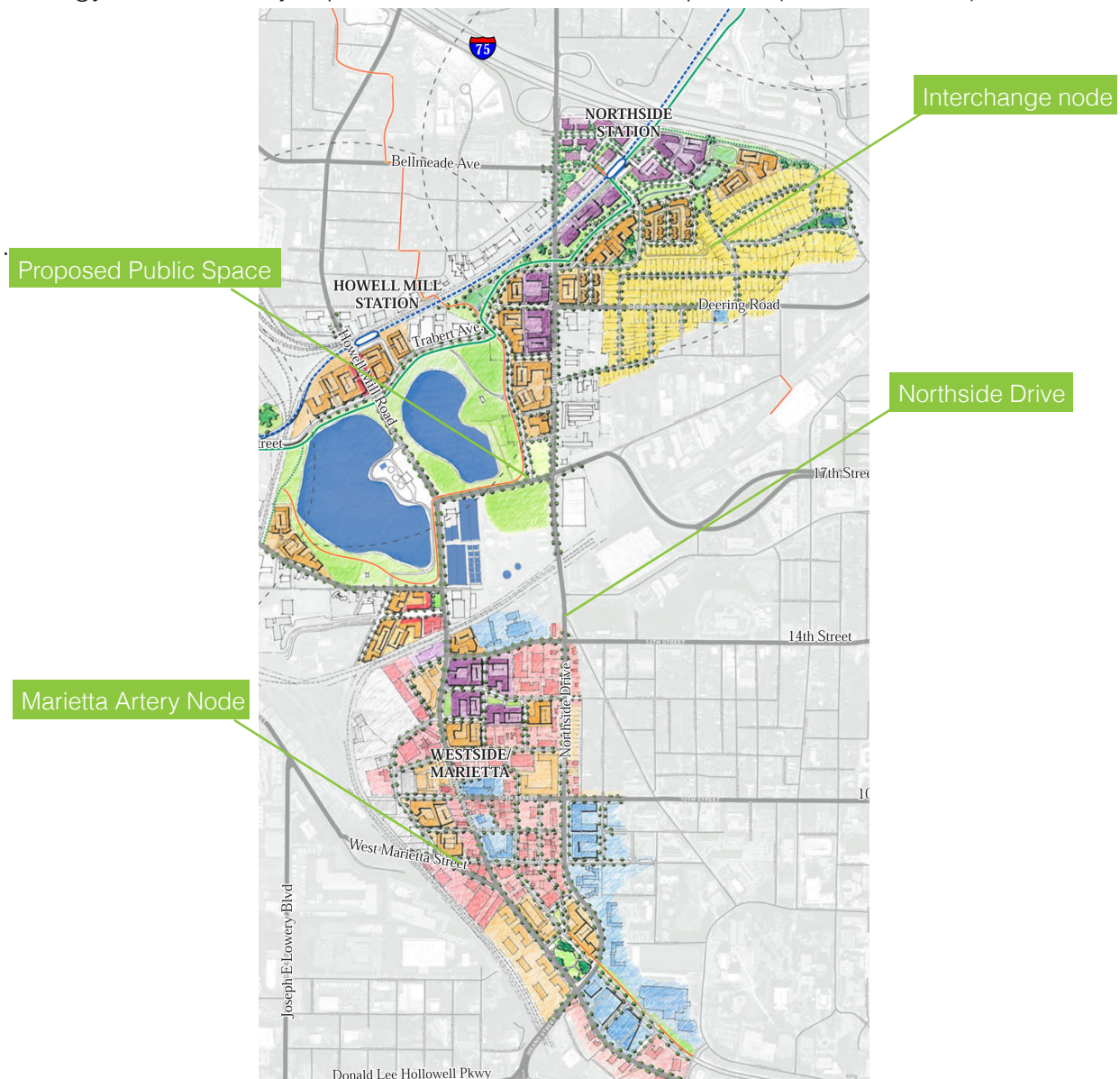


5.9 "Urban Boulevard" Scenario with BRT in exclusive lanes, and four general purpose lanes (Source: City of Atlanta)

BeltLine Subarea 8 Plan

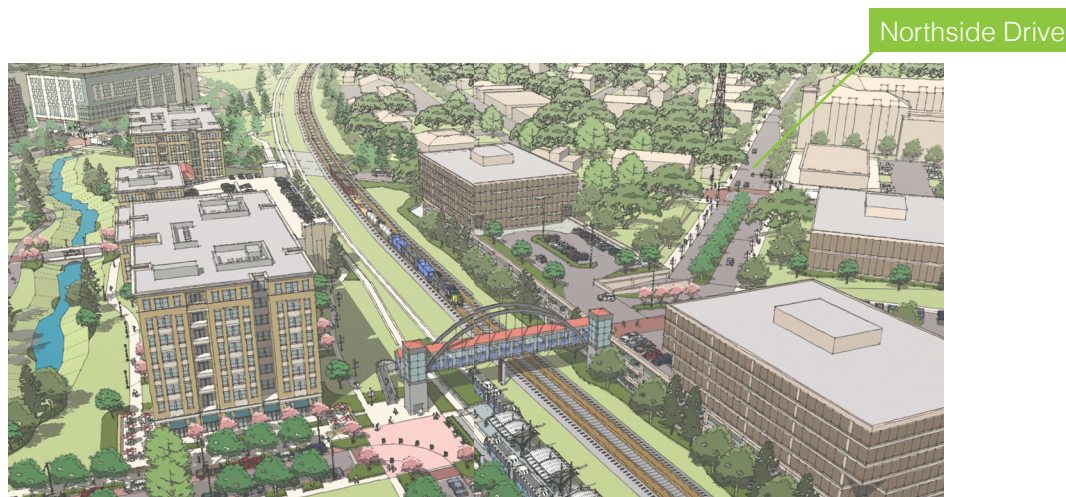
Vision:

This study focuses on the segment between I-75 and Marietta Street. BeltLine envisions the Northside Drive corridor as a high intensity mixed-use corridor with office, residential and retail development. A station for the proposed light rail transit system will exist at I-75 and Northside Drive interchange. As noted in the image below, a nodal strategy is desired to jump start the corridor redevelopment (AECOM, 2012).



6.0 Illustrative Urban Design Plan (Source: AECOM)

BeltLine Subarea 8 Plan

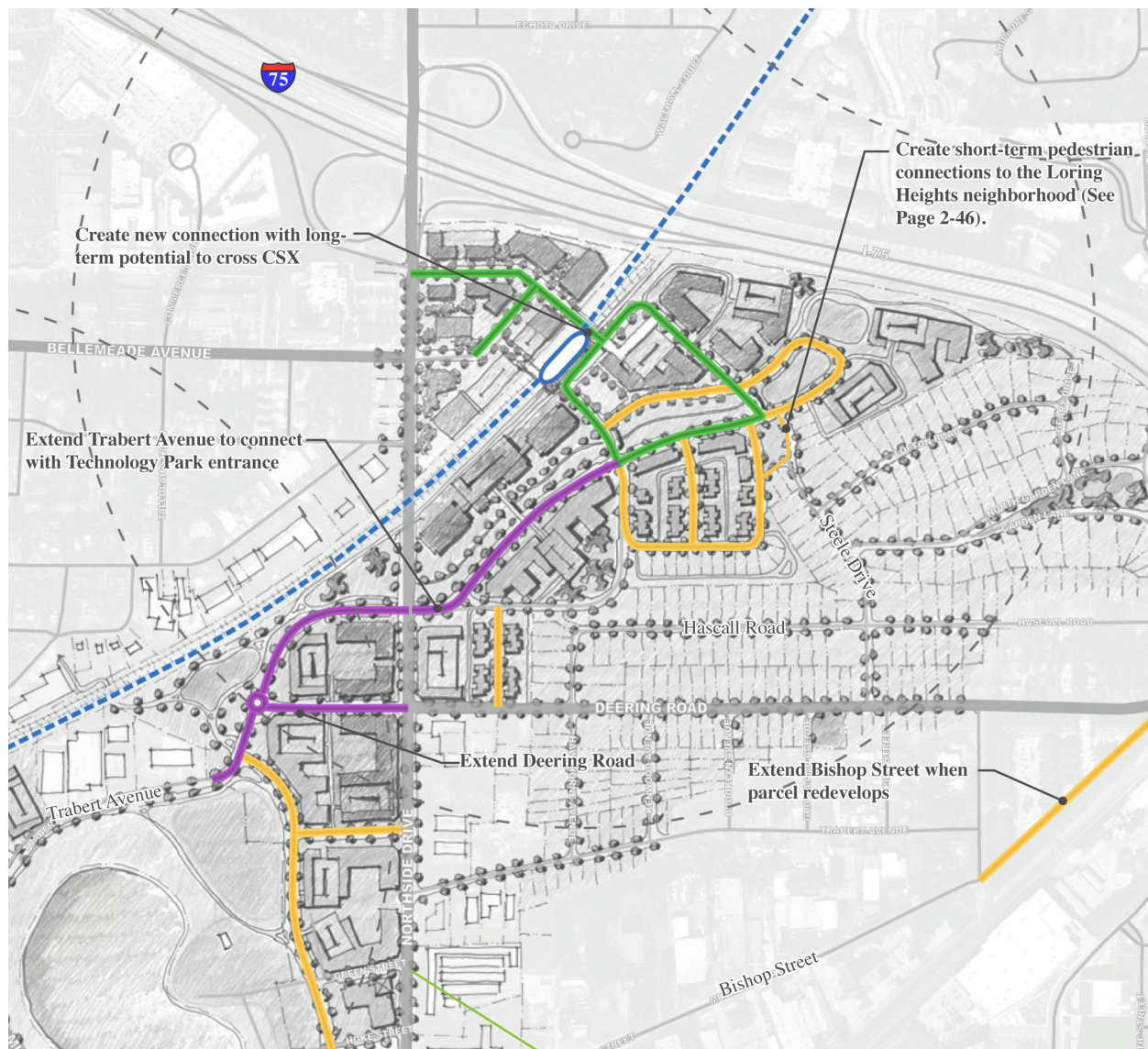


6.1 Northside Drive Station (Source: AECOM)

Details

- The Waterworks site will be retrofitted into a public space and park. The western side of the Northside Drive corridor runs along these lots and has the potential to front the new public amenity (AECOM, 2012).
- The intersection of Northside Drive and Marietta Street will also change. Existing as the site of the surrender of Atlanta to the union forces during the Civil War, this crossroads serves as an extraordinary location for a new public amenity and memorial to the city's history.
- Northside Drive will be realigned from a couplet to a single street just north of its intersection with Marietta Street. This newly acquired land will serve as the site for the aforementioned memorial park.
- This proposed BeltLine station will also serve as a location for new office and mixed use development, with the desire to create a nodal employment center.
- Tanyard Creek will be restored near the I-75/Northside Drive area and integrated into the station design and development.
- Street extensions, framework and connectivity improvements along Deering Road, Trabert Avenue, Steele Drive, and Bishop Street (AECOM, 2012).

BeltLine Subarea 8 Plan



6.2 Extended Street Network Plan (Source: AECOM)

Northside Drive

How do we fix this? _____

How do we fix this?

Given that this analysis focuses on understanding the problems within the corridor in relation to its morphologies, informed ideas based off evidence can be proposed to mediate conditions on Northside Drive. Understanding this, a holistic approach to an intervention on the arterial is recommended. Because this twelve mile arterial has many varied conditions, one big idea or overall solution will not work. The tissue morphologies aid in knowing what areas will redevelop more quickly and which will remain the same for the foreseeable future.

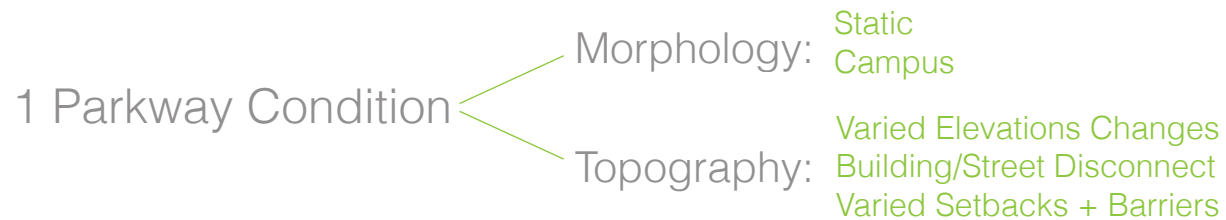


6.3 Northside sidewalk conditions



6.4 Northside at 16th Street

How do we fix this?

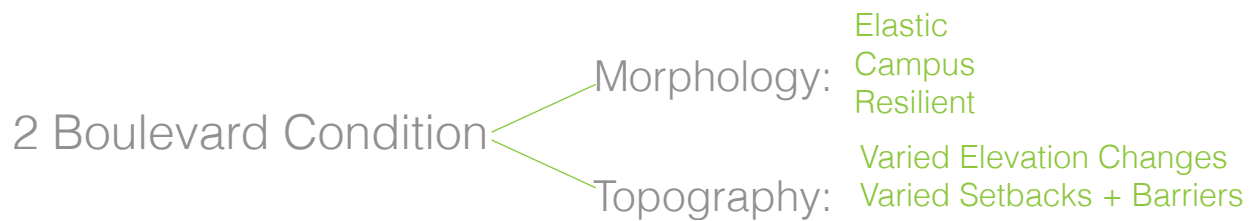


Segment one and two are filled with static tissues containing single family homes. Understanding this, these development patterns will not change in the foreseeable future. The buildings are completely disconnected from the street due to topographical barriers and large setbacks. Additionally, the landscape is over run with dendritic development patterns, fostering low connectivity. With this said, the corridor from I-285 to I-75 will remain a Parkway condition for the near future. As illustrated in the photo below, these conditions are privileging the car, with minimum pedestrian infrastructure, as it is not needed in this area.



6.5 Northside north of North Atlanta High School (Source: Google Earth)

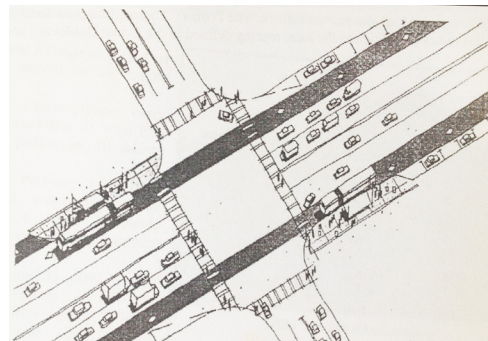
How do we fix this?



The second proposal is transforming Northside Drive within its more urbanized segments of three and four into a boulevard condition. These zones exhibit higher potential for development due to the mix of elastic, campus and resilient tissues among less topographical barriers. As the City of Atlanta proposed in their 2005 transportation study, the urban boulevard condition would improve automobile, transit and pedestrian amenities within six lanes of traffic (City of Atlanta, 2005). These improvements make sense, but the six lane proposal from curb to curb should be examined carefully, and the possibility of Northside Drive going on a road diet should be incorporated into the overall planning and design analysis. The American notion of the boulevard must change from one being associated with suburban conditions, to the European notion of the boulevard, which proposes a more walkable, multi modal urban street. As noted in *The Boulevard Book*, the development of these street conditions should signify good things to come, (Rofe, 2003).

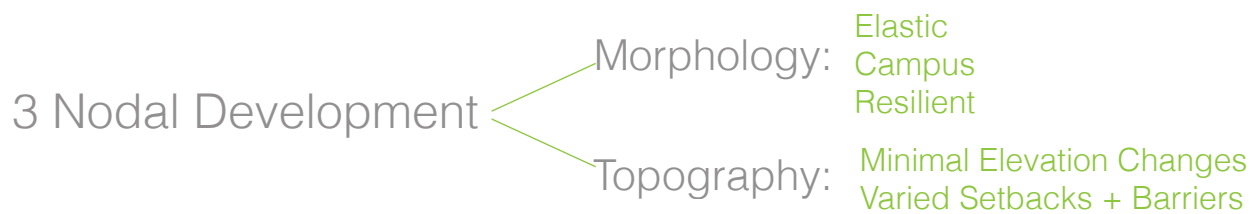


6.6 Northside at Hemphill



6.7 Boulevard image (Source: City of Atlanta)

How do we fix this?

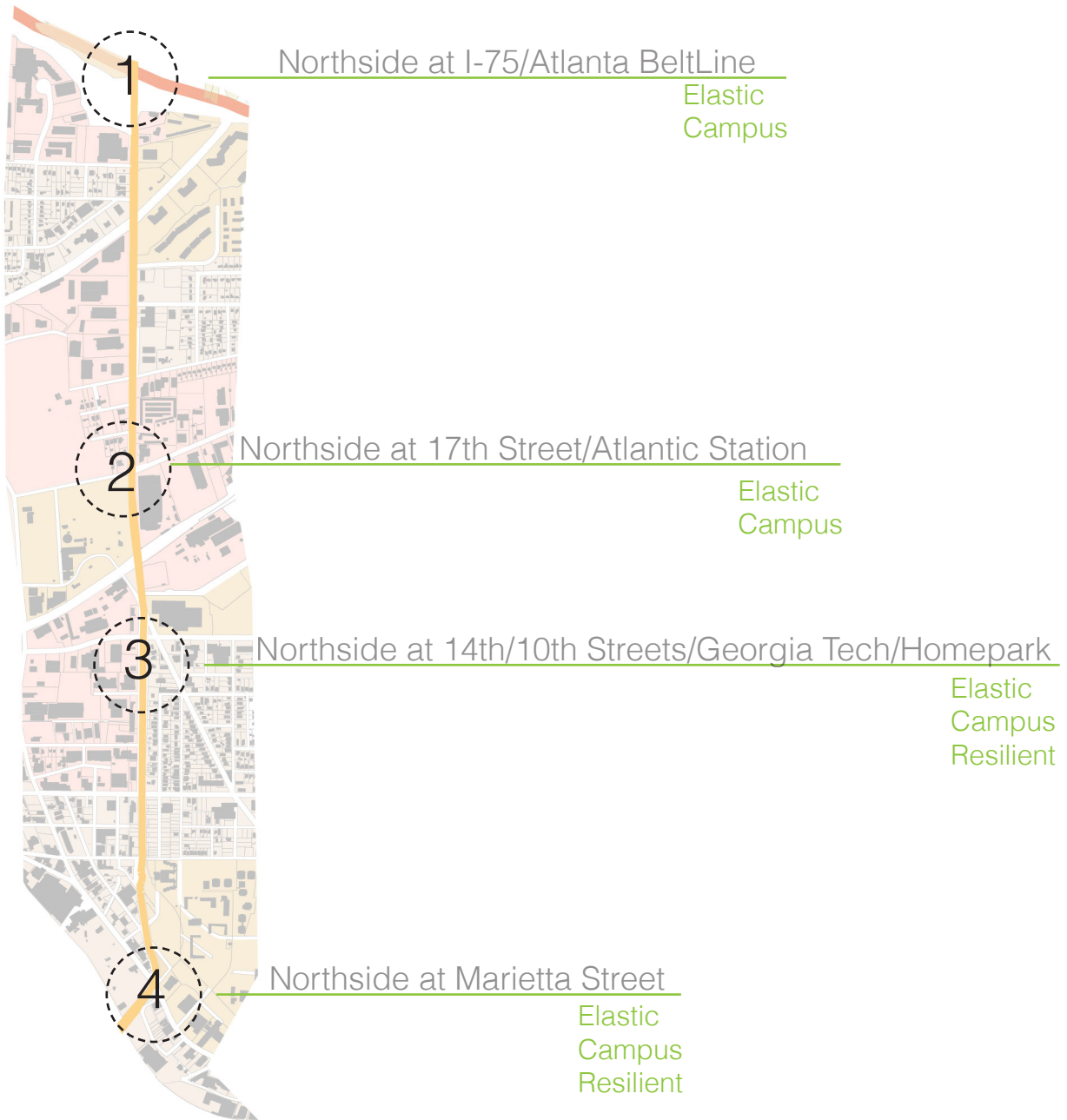


The third proposal is understanding the project holistically, and that the parts must relate to the whole. A series of seven nodal development zones are proposed as a first step to creating a more connected street in the elastic, campus and resilient tissue areas. Over time, as the nodes, parkway and boulevard conditions develop together a more unified corridor is possible. These nodes relate to both the zones proposed by the City of Atlanta within the Northside Corridor Study of 2005, The Atlanta BeltLine Subarea Plan and the morphological analysis.

Proposed Nodes:

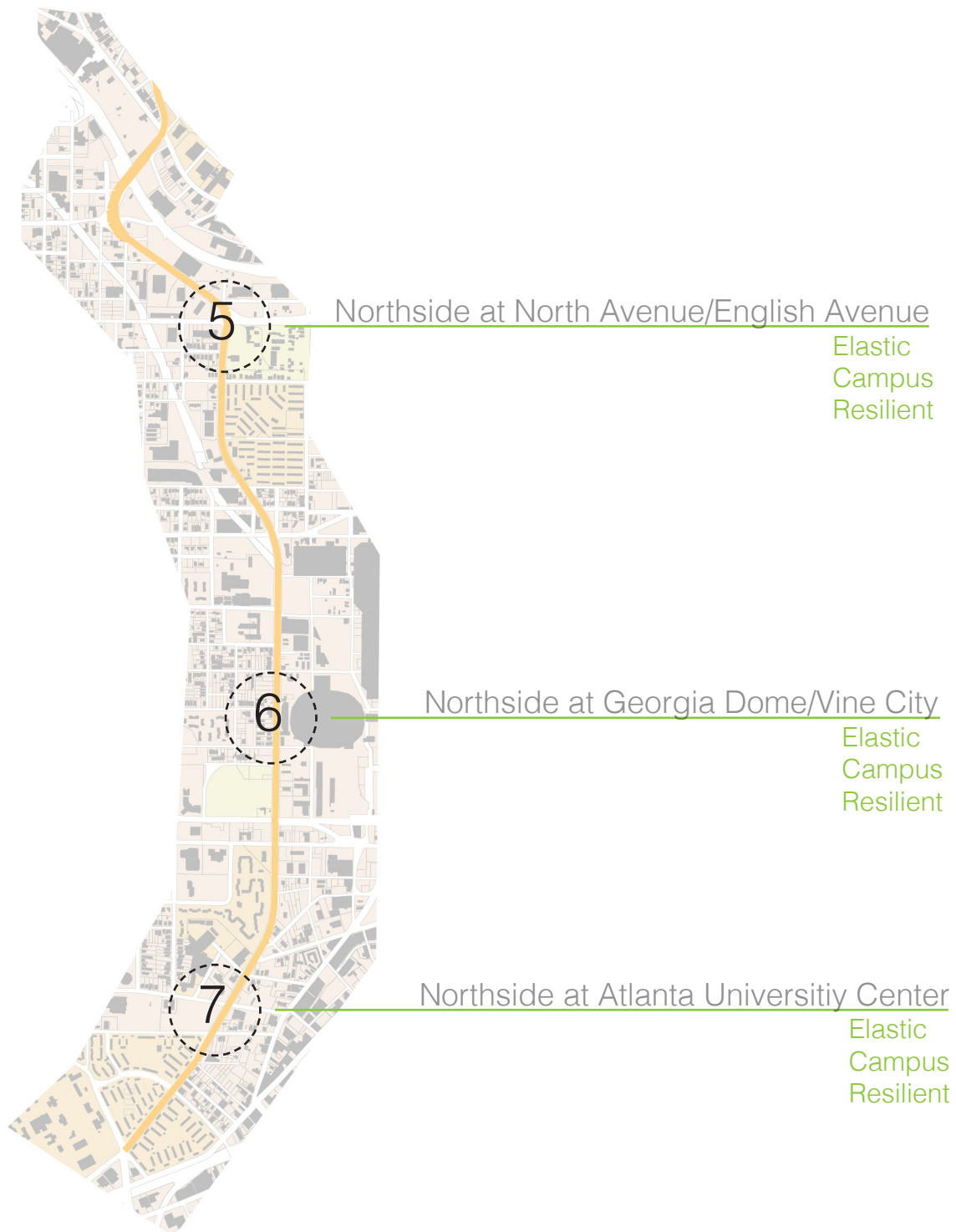
- 1 Northside Drive at I-75/Atlanta BeltLine
- 2 Northside Drive at 17th Street/Atlantic Station
- 3 Northside Drive at 10th/14th Streets/Georgia Tech/Home Park
- 4 Northside Drive at Marietta Street
- 5 Northside Drive at North Avenue/English Avenue
- 6 Northside Drive at Georgia Dome/GWCC/Vine City
- 7 Northside Drive at The Atlanta University Center

How do we fix this?



6.8 Northside between I-75 and Marietta St.

How do we fix this?



6.9 Northside between Marietta St and I-20

How do we fix this?

Summarizing the analysis and recommendations, Northside Drive is again, a particular type of arterial. The changes within this twelve mile corridor are drastic and tricky to mediate. Understanding this, the interaction between the topography and morphologies is apparent and should not be ignored. Layering this knowledge with the realization that this street was developed incrementally for different reasons at different times lends its self to the idea that a lack of master planning crippled this arterial. For that reason the corridor must be analyzed as both a whole and as parts.

Using the study of morphologies within urban and suburban conditions is an imperative analytical strategy not only for Northside Drive, but all development case studies. Understanding the adjacencies of development tissues leads to a deeper knowledge of how the study area has developed over time and how it will and can change in the future. No proposal for this corridor or any can live up to its potential without a careful understanding of what problems exist, which can be revealed through the filter of morphological analysis.

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